

Martin Lake Dam and Martin Lake

OWNER

Dallas Power and Light Company.
Texas Electric Service Company.
Texas Power and Light Company.
Texas Utilities Services, Inc. (Agent).

ENGINEER

Forrest and Cotton, Inc.

LOCATION

On Martin Creek in Rusk and Panola Counties, 17 miles northeast of Henderson and 3 miles southwest of Tatum.

DRAINAGE AREA

130 square miles.

DAM

Type	Earthfill
Length	6,875 ft
Height	61± ft
Top width	20 ft
Top elevation	321.5 ft above msl

SPILLWAY (emergency)

Location	Left of the dam
Type	Uncontrolled
Crest length	1,000 ft
Crest elevation	312.0 ft above msl

SPILLWAY (service)

Location	Near left end of the dam
Type	Concrete ogee and chute
Crest length (net)	160 ft
Crest elevation	294.0 ft above msl
Control	4 tainter gates, each 40 by 14 ft

OUTLET WORKS

One low-flow outlet is a 3 by 5 ft conduit with sluice gate control located in one of the gate piers with invert at elevation 284.0 ft above msl. Additional low-flow outlet is an 8-inch pipe with invert at elevation 286.0 ft above msl with a downstream sluice gate control. Water is pumped from the lake to the powerplant and returned to the lake.

POWER FEATURE

Ultimate capacity	Four 750,000 kw units
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AUTHORIZATION

Permit No. 2693 (Application No. 2932), November 19, 1971, to Dallas Power and Light Company, Texas Electric Service Company, and Texas Power and Light Company authorizes the construction of a dam to impound 77,619 acre-feet of water. Permittee is authorized to divert and use 6,250 acre-feet of water per annum for each 750,000 kw unit. The maximum rate of diversion for cooling purposes will be 4,190 cubic feet per second.

RESERVOIR DATA

Capacity	77,619 acre-feet at elevation 306.0 ft above msl
Area	5,020 acres at elevation 306.0 ft above msl

GENERAL

Construction started	May 31, 1972
Construction completed	September 30, 1974

